

CLAIMS

1. A mobile-object terminal device comprising:

at least one functional means;

a receiving unit;

5 an information storage unit;

a function restriction unit; and

an accumulated benefit information reading unit,

wherein said information storage unit comprises:

a function restriction information storage unit;

10 a benefit information storage unit; and

an emergency information storage unit,

wherein said receiving unit receives mobile-object information including:

function restriction information for use in restricting a function of said at least one of functional means; benefit information for use in determining benefit to be given in

15 compensation for restriction of the function of said at least one of functional means, the restriction being executed according to the function restriction information; and emergency information to be issued in case of emergency for use in releasing restriction imposed on the function of said at least one of functional means,

20 wherein said function restriction information storage unit stores the function restriction information included in the mobile-object information received by said receiving unit,

wherein said benefit information storage unit stores temporally the benefit information included in the mobile-object information received by said receiving unit, and stores accumulatively benefit determined on the basis of the benefit information as
25 accumulated benefit information,

wherein said emergency information storage unit stores the emergency information included in the mobile-object information received by said receiving unit,

wherein said function restriction unit, based on the function restriction information stored in said function restriction information storage unit and the emergency information stored in said emergency information storage unit, restricts the execution of the function of said at least one functional means, and at the same time
5 determines, in accordance with the restricted function, the benefit to be accumulatively stored in said benefit information storage unit from the benefit information stored temporally in said benefit information storage unit, and

wherein said accumulated benefit information reading unit, in response to external request, reads out and processes the accumulated benefit information stored in
10 said benefit information storage unit, thereby storing the processed, accumulated benefit information into said benefit information storage unit.

2. The mobile-object terminal device as defined in claim 1, further comprising:

a first power supply of which the electric power supply is able to be switched on and off by a user; and

15 a second power supply of which the electric power supply is unable to be switched on and off by the user,

wherein said function restriction unit and said at least one of functional means are fed by said first power supply, and

wherein said receiving unit, said information storage unit, and said
20 accumulated benefit information reading unit are fed by said second power supply, and operate independently of said at least one of functional means.

3. The mobile-object terminal device as defined claim 1, wherein, when a function start direction is issued for said at least one of functional means, said function restriction unit restricts the execution of the function by said at least one of functional
25 means to which the function start direction is issued, based on the function restriction information stored in said function restriction information storage unit and the emergency information stored in said emergency information storage unit.

4. The mobile-object terminal device as defined by claim 1, wherein, when said receiving unit receives the mobile-object information, said function restriction information storage unit stores the function restriction information included in the mobile-object information, said emergency information storage unit stores the emergency information included in the mobile-object information, and said benefit information storage unit stores temporally the benefit information included in the mobile-object information,

wherein when a predetermined time elapses after said receiving unit has received the mobile-object information, said function restriction information storage unit deletes or invalidates the function restriction information stored therein, said emergency information storage unit deletes or invalidates the emergency information stored therein, and said benefit information storage unit stores accumulatively benefit determined based on the temporally-stored benefit information as the accumulated benefit information.

5. The mobile-object terminal device as defined in claim 1, wherein the mobile-object information further includes function restriction start information and function restriction release information,

wherein when said receiving unit receives the mobile-object information including the function restriction start information, said function restriction information storage unit stores the function restriction information included in the mobile-object information, said emergency information storage unit stores the emergency information included in the mobile-object information, and said benefit information storage unit stores temporally the benefit information included in the mobile-object information, and

wherein when said receiving unit receives the mobile-object information including the function restriction release information, said function restriction information storage unit deletes or invalidates the function restriction information stored therein, said emergency information storage unit deletes or invalidates the emergency

information stored therein, and said benefit information storage unit stores accumulatively benefit determined based on the temporally-stored benefit information as accumulated benefit information.

6. The mobile-object terminal device defined in claim 1, wherein said at least one functional means includes at least one of a communications means, a shooting means, a recording means, and a sounding means.

7. The mobile-object terminal device defined in claim 1, wherein said at least one functional means includes a speed control means operable to control speed of a vehicle.

8. A mobile-object-function restriction system comprising:
a plurality of transmitting devices;
a mobile-object terminal device; and
a read-out device,

wherein each of said plurality of transmitting devices comprises a transmitting unit operable to transmit mobile-object information to a predetermined area, the mobile-object information including: function restriction information for use in restricting functions of said mobile-object terminal device; benefit information for use in determining benefit to be awarded in compensation for restriction of the functions of said mobile-object terminal device, the restriction being executed according to the function restriction information; and emergency information to be issued in case of emergency for use in releasing restriction imposed on the functions of said mobile-object terminal device,

wherein said mobile-object terminal device comprises:
at least one functional means;
a receiving unit;
an information storage unit;
a function restriction unit; and

an accumulated benefit information reading unit,

wherein said information storage unit comprises:

a function restriction information storage unit;

a benefit information storage unit; and

5 an emergency information storage unit,

wherein said receiving unit receives the mobile-object information transmitted by each of said plurality of transmitting devices,

wherein said function restriction information storage unit stores the function restriction information included in the mobile-object information received by said receiving unit,

wherein said benefit information storage unit stores temporally the benefit information included in the mobile-object information received by said receiving unit, and stores accumulatively benefit determined on the basis of the benefit information as accumulated benefit information,

15 wherein said emergency information storage unit stores the emergency information included in the mobile-object information received by said receiving unit,

wherein said function restriction unit, based on the function restriction information stored in said function restriction information storage unit and the emergency information stored in said emergency information storage unit, restricts the execution of the function of said at least one functional means, and at the same time determines, in accordance with the restricted function, the benefit to be accumulatively stored in said benefit information storage unit from the benefit information stored temporally in said benefit information storage unit,

wherein said accumulated benefit information reading unit, in response to request by said read-out device, reads out and processes the accumulated benefit information stored in said benefit information storage unit, thereby storing the processed, accumulated benefit information into said benefit information storage unit,

and

wherein said read-out device acquires the accumulated benefit information stored in said benefit information storage unit, by requesting said accumulated benefit information reading unit.

5 9. The mobile-object-function restriction system as defined in claim 8, wherein the mobile-object information further includes function restriction start information to validate the function restriction information and function restriction release information to invalidate the function restriction information, and

 wherein, in the predetermined area with an entrance and an exit, the entrance
10 being provided with one of said plurality of transmitting devices as an entrance transmitting device and the exit being provided with another of said plurality of transmitting devices as an exit transmitting device, the entrance transmitting device transmits the mobile-object information including the function restriction start information, and the exit transmitting device transmits the mobile-object information
15 including the function restriction release information.

 10. The mobile-object-function restriction system as defined in claim 8, wherein said plurality of transmitting devices transmit separately the mobile-object information including both the function restriction information and the benefit information, and the mobile-object information including the emergency information.

20 11. The mobile-object-function restriction system as defined in claim 8, wherein communications between said mobile-object terminal device and said plurality of transmitting devices are performed by noncontact technique.

 12. A mobile-object-function restriction method comprising:

 a function executing step of executing at least one of functions of a
25 mobile-object terminal device;

 a transmitting step of transmitting mobile-object information to a predetermined area, the mobile-object information including: function restriction

information for use in restricting functions to be executed in said function executing step; benefit information for use in determining benefit to be awarded in compensation for restriction of the at least one of functions, the restriction being executed according to the function restriction information; and emergency information to be issued in case of
 5 emergency for use in releasing restriction imposed on the at least one of functions;

a receiving step of receiving the mobile-object information transmitted in said transmitting step;

a storing step of storing the mobile-object information received in said receiving step;

10 a controlling step of controlling functions to be executed in said function executing step, based on the function restriction information and emergency information included in the mobile-object information stored in said storing step; and

an accumulating step of accumulating, as accumulated benefit information, benefit determined on the basis of the benefit information included in the mobile-object
 15 information stored in said storing step, corresponding to the functions restricted in said controlling step.

13. The mobile-object-function restriction method as defined in claim 12, wherein when function start direction is issued in said function executing step, said controlling step includes restricting a function to which the function start direction is
 20 issued, based on the function restriction information and emergency information included in the mobile-object information stored in said storing step.

14. The mobile-object-function restriction method as defined in claim 12, wherein when the mobile-object information is received in said receiving step, said storing step includes storing the mobile-object information received, and

25 wherein when a predetermined time elapses after the mobile-object information has been received in said receiving step, said storing step includes deleting or invalidating the function restriction information and emergency information included in

the mobile-object information stored, and said accumulating step includes accumulating, as accumulated benefit information, benefit determined based on the benefit information included in the mobile-object information stored.

15 15. The mobile-object-function restriction method as defined in claim 12, wherein the mobile-object information further includes function restriction start information and function restriction start information,

wherein when the mobile-object information including the function restriction start information is received in said receiving step, said storing step includes storing the mobile-object information received, and

10 wherein when the mobile-object information including the function restriction release information is received in said receiving step, said storing step includes deleting or invalidating the function restriction information and emergency information included in the mobile-object information stored and said accumulating step includes accumulating, as accumulated benefit information, benefit determined based on the
15 benefit information included in the mobile-object information stored.

16. The mobile-object-function restriction method as defined in claim 12, wherein said transmitting step includes transmitting separately the mobile-object information including both the function restriction information and the mobile-object information and the mobile-object information including the emergency information.

20 17. The mobile-object-function restriction method as defined in claim 12, wherein the function to be executed in said function executing step includes at least one of a communicating function, a shooting function, and a sounding function.

18. The mobile-object-function restriction method as defined in claim 12, wherein the function to be executed in said function executing step includes a speed
25 control function to control speed of a vehicle.

19. A recording medium storing, in a computer readable manner, a program describing a mobile-object-function restriction method, the mobile-object-function

restriction method comprising:

a function executing step of executing at least one of functions of a mobile-object terminal device;

5 a transmitting step of transmitting mobile-object information to a predetermined area, the mobile-object information including: function restriction information for use in restricting functions to be executed in said function executing step; benefit information for use in determining benefit to be awarded in compensation for restriction of the at least one of functions, the restriction being executed according to the function restriction information; and emergency information to be issued in case of
10 emergency for use in releasing restriction imposed on the at least one of functions;

a receiving step of receiving the mobile-object information transmitted in said transmitting step;

a storing step of storing the mobile-object information received in said receiving step;

15 a controlling step of controlling functions to be executed in said function executing step, based on the function restriction information and emergency information included in the mobile-object information stored in said storing step; and

an accumulating step of accumulating, as accumulated benefit information, benefit determined on the basis of the benefit information included in the mobile-object
20 information stored in said storing step, in correspondence with the function restricted in said controlling step.